

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:

10/597,034

Source:

IFW0

Date Processed by STIC:

7/12/06

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IFWO

RAW SEQUENCE LISTING

DATE: 07/12/2006

PATENT APPLICATION: US/10/597,034

TIME: 09:33:14

Input Set : A:\034205.003.ST25.txt

Output Set: N:\CRF4\07122006\J597034.raw

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3 <110> APPLICANT: Ottawa Health Research Institute
5 <120> TITLE OF INVENTION: Diabetogenic Epitopes
7 <130> FILE REFERENCE: 034205.003
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/597,034
C--> 9 <141> CURRENT FILING DATE: 2006-07-07
9 <150> PRIOR APPLICATION NUMBER: PCT/CA05/00025
10 <151> PRIOR FILING DATE: 2005-01-10
12 <150> PRIOR APPLICATION NUMBER: US 60/535,278
13 <151> PRIOR FILING DATE: 2004-01-09
15 <160> NUMBER OF SEQ ID NOS: 52
17 <170> SOFTWARE: PatentIn version 3.3
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 10
21 <212> TYPE: PRT
22 <213> ORGANISM: Artificial
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Diabetogenic epitope from gliadin protein isoforms or G1b1
based
26      on wheat protein
28 <400> SEQUENCE: 1
30 Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln
31 1          5          10
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 9
36 <212> TYPE: PRT
37 <213> ORGANISM: Unknown
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Tryptic peptide of wheat storage globulin
42 <400> SEQUENCE: 2
44 Val Ala Ile Met Glu Val Asn Pro Arg
45 1          5
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 2018
50 <212> TYPE: DNA
51 <213> ORGANISM: Unknown
53 <220> FEATURE:
54 <223> OTHER INFORMATION: Wheat gene
56 <400> SEQUENCE: 3
57 atggcgacca gaggcagagc aaccatccct ctctcttctc tcttgggcac aagccttctc      60
59 ttcgccgcgg ctgttttcggc ctcccatgac gaggaggagg acaggcgcgg tgggcgctcg      120
61 cttcagcggt gcggtgcagcg gtgccagcag gaccggccgc ggtactctca tgcccggtgc      180
63 gtgcaggagt gccgggacga ccagcagcag cacggaaggc acgagcagga ggagcagggc      240
65 cgcgggcatg gccggcacgg cgaggggggag cgtgaggagg agcagggccg tggccgtggg      300
67 cggcgcggcc agggagagcg tgaggaggag cagggccgtg gacgtgggcg gcgcggcgag      360

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69 ggagagcgtg atgaggagca cggggatggc cggcgccgct acgtgttcgg cccgcgcagc 420
71 ttccgccgca tcatccggag cgaccacggg ttcgtcaagg cccttcgccc gttcgacgaa 480
73 gtgtccaggc tcctccgggg catcaggaaac taccgtgtcg ccatcatgga ggtgaacccg 540
75 cgcgcgttcg tcgtgccggg actcacggac gcagacggcg tcgggtacgt cgctcaaggc 600
77 gagggggtgc tgacggtgat cgagaacggc gagaagcggg cctacaccgt caggcaaggc 660
79 gatgtgatcg tggcgccggc ggggtccatc atgcacctgg ccaacaccga cggccggagg 720
81 aagctggtca tcgccaagat tctccacacc atctccgtcc ccggcaagtt ccagtatttc 780
83 tcggccaagc ctctcctcgc tagtttgagc aaacgcgtgc tcacagcggc gttaaagacc 840
85 tcggatgagc ggctgggtag tctcttgggc agccgccaag gcaaggagga ggaggagaag 900
87 tccatctcca tcgtccgcgc gtcagaggag cagctccgcg agctgcgtcg ccaggcgtcc 960
89 gagggtgacc agggccacca ctggcctctc ccccgcttcc gcggcgactc gcgcgacacc 1020
91 ttcaacctcc tggagcagcg ccccaagatc gccaaccgcc atggccgcct ctacgaggcc 1080
93 gacgcccgtg gcttccacgc cctcgcccaa cacgacgtcc gcgtcgccgt ggccaacatc 1140
95 acgcccgggt ctatgaccgc gccctacctg aacacccagt cgttcaagct cgccgtcgtg 1200
97 ctggaaggcg agggcgaggt ggagatcgtc tgcccgcacc tcggccgcga cagcgagcgc 1260
99 cgcgagcaag agcacggcaa gggcaggtgg aggagcgagg aagaggagga cgaccggcgg 1320
101 cagcaacgcc gacgcgggtc cggtccgag tcggaggagg agcaggacca gcagaggtag 1380
103 gagacggtcc gcgcgcgggt gtcgcgcggc tcggcggttc tgggtgcccc cggccaccgc 1440
105 gtggtggaga tcgcctcgtc ccgcggcagc agcaacctcc aggtggtgtg cttcgagatc 1500
107 aacgccgaga ggaacgagcg ggtgtggctc gccgggagga acaacgtgat cgccaagctg 1560
109 gacgaccccg cccaggagct cgccttcggc agggccgcga gggaggtgca ggaggtgttc 1620
111 cgcgccaaag atcagcagga cgagggcttc gtcgccggac ccgagcagca gcaggagcat 1680
113 gagcgcgggg accgccgccg tggtgaccgc gggcgcgggc acgaagccgt ggaggcggtc 1740
115 ctgaggatgg caaccgccgc gctctgaggc ggcaaggccg ctggtgttaa gtgaatgtgt 1800
117 gagctggagc ccgtgccatt tgagagctga acttgtagt gtgtgtaagt ttgtcagtac 1860
119 gcgggagtag cataaataag tcgtggcacg ggctcagtac gatgatgtaa gttgcgtacc 1920
121 taccttctac caaggcatgc atgcccaaca taaataaaca caagggcggt gcgcctcttt 1980
123 ttcagtaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2018

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126 <210> SEQ ID NO: 4

127 <211> LENGTH: 588

128 <212> TYPE: PRT

129 <213> ORGANISM: Unknown

131 <220> FEATURE:

132 <223> OTHER INFORMATION: WP5212 wheat protein sequence

134 <400> SEQUENCE: 4

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136 Met Ala Thr Arg Gly Arg Ala Thr Ile Pro Leu Leu Phe Leu Leu Gly
137 1 5 10 15
140 Thr Ser Leu Leu Phe Ala Ala Ala Val Ser Ala Ser His Asp Glu Glu
141 20 25 30
144 Glu Asp Arg Arg Gly Gly Arg Ser Leu Gln Arg Cys Val Gln Arg Cys
145 35 40 45
148 Gln Gln Asp Arg Pro Arg Tyr Ser His Ala Arg Cys Val Gln Glu Cys
149 50 55 60
152 Arg Asp Asp Gln Gln Gln His Gly Arg His Glu Gln Glu Glu Gln Gly
153 65 70 75 80
156 Arg Gly His Gly Arg His Gly Glu Gly Glu Arg Glu Glu Glu Gln Gly
157 85 90 95
160 Arg Gly Arg Gly Arg Arg Gly Gln Gly Glu Arg Glu Glu Glu Gln Gly
161 100 105 110

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164 Arg Gly Arg Gly Arg Arg Gly Glu Gly Glu Arg Asp Glu Glu His Gly
165      115      120      125
168 Asp Gly Arg Arg Pro Tyr Val Phe Gly Pro Arg Ser Phe Arg Arg Ile
169      130      135      140
172 Ile Arg Ser Asp His Gly Phe Val Lys Ala Leu Arg Pro Phe Asp Glu
173 145      150      155      160
176 Val Ser Arg Leu Leu Arg Gly Ile Arg Asn Tyr Arg Val Ala Ile Met
177      165      170      175
180 Glu Val Asn Pro Arg Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp
181      180      185      190
184 Gly Val Gly Tyr Val Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu
185      195      200      205
188 Asn Gly Glu Lys Arg Ser Tyr Thr Val Arg Gln Gly Asp Val Ile Val
189      210      215      220
192 Ala Pro Ala Gly Ser Ile Met His Leu Ala Asn Thr Asp Gly Arg Arg
193 225      230      235      240
196 Lys Leu Val Ile Ala Lys Ile Leu His Thr Ile Ser Val Pro Gly Lys
197      245      250      255
200 Phe Gln Tyr Phe Ser Ala Lys Pro Leu Leu Ala Ser Leu Ser Lys Arg
201      260      265      270
204 Val Leu Thr Ala Ala Leu Lys Thr Ser Asp Glu Arg Leu Gly Ser Leu
205      275      280      285
208 Leu Gly Ser Arg Gln Gly Lys Glu Glu Glu Glu Lys Ser Ile Ser Ile
209      290      295      300
212 Val Arg Ala Ser Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Ala Ser
213 305      310      315      320
216 Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe Arg Gly Asp
217      325      330      335
220 Ser Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn
221      340      345      350
224 Arg His Gly Arg Leu Tyr Glu Ala Asp Ala Arg Ser Phe His Ala Leu
225      355      360      365
228 Ala Gln His Asp Val Arg Val Ala Val Ala Asn Ile Thr Pro Gly Ser
229      370      375      380
232 Met Thr Ala Pro Tyr Leu Asn Thr Gln Ser Phe Lys Leu Ala Val Val
233 385      390      395      400
236 Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro His Leu Gly Arg
237      405      410      415
240 Asp Ser Glu Arg Arg Glu Gln Glu His Gly Lys Gly Arg Trp Arg Ser
241      420      425      430
244 Glu Glu Glu Glu Asp Asp Arg Arg Gln Gln Arg Arg Arg Gly Ser Gly
245      435      440      445
248 Ser Glu Ser Glu Glu Glu Gln Asp Gln Gln Arg Tyr Glu Thr Val Arg
249      450      455      460
252 Ala Arg Val Ser Arg Gly Ser Ala Phe Val Val Pro Pro Gly His Pro
253 465      470      475      480
256 Val Val Glu Ile Ala Ser Ser Arg Gly Ser Ser Asn Leu Gln Val Val
257      485      490      495
260 Cys Phe Glu Ile Asn Ala Glu Arg Asn Glu Arg Val Trp Leu Ala Gly

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261          500          505          510
264 Arg Asn Asn Val Ile Ala Lys Leu Asp Asp Pro Ala Gln Glu Leu Ala
265          515          520          525
268 Phe Gly Arg Pro Ala Arg Glu Val Gln Glu Val Phe Arg Ala Lys Asp
269          530          535          540
272 Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu His
273 545          550          555          560
276 Glu Arg Gly Asp Arg Arg Arg Gly Asp Arg Gly Arg Gly Asp Glu Ala
277          565          570          575
280 Val Glu Ala Phe Leu Arg Met Ala Thr Ala Ala Leu
281          580          585
284 <210> SEQ ID NO: 5
285 <211> LENGTH: 291
286 <212> TYPE: PRT
287 <213> ORGANISM: Unknown
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Alpha/beta-gliadin A-II precursor of wheat protein
292 <400> SEQUENCE: 5
294 Met Lys Thr Phe Pro Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr
295 1          5          10          15
298 Ala Thr Thr Ala Val Arg Val Pro Val Pro Gln Leu Gln Leu Gln Asn
299          20          25          30
302 Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Glu Gln
303          35          40          45
306 Gln Phe Gln Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
307          50          55          60
310 Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
311 65          70          75          80
314 Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro
315          85          90          95
318 Gln Gln Pro Tyr Pro Gln Pro Gln Pro Gln Tyr Ser Gln Pro Gln Gln
319          100          105          110
322 Pro Ile Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
323          115          120          125
326 Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu Ile Pro Cys Arg
327          130          135          140
330 Asp Val Val Leu Gln Gln His Asn Ile Ala His Gly Ser Ser Gln Val
331 145          150          155          160
334 Leu Gln Glu Ser Thr Tyr Gln Leu Val Gln Gln Leu Cys Cys Gln Gln
335          165          170          175
338 Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala Ile His Asn Val
339          180          185          190
342 Val His Ala Ile Ile Leu His Gln Gln His His His His Gln Gln Gln
343          195          200          205
346 Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
347          210          215          220
350 Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Phe Phe Gln Pro Ser Gln
351 225          230          235          240
354 Gln Asn Pro Gln Ala Gln Gly Ser Phe Gln Pro Gln Gln Leu Pro Gln

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355          245          250          255
358 Phe Glu Glu Ile Arg Asn Leu Ala Leu Gln Thr Leu Pro Ala Met Cys
359          260          265          270
362 Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Phe Gly Ile Phe
363          275          280          285
366 Gly Thr Asn
367      290
370 <210> SEQ ID NO: 6
371 <211> LENGTH: 307
372 <212> TYPE: PRT
373 <213> ORGANISM: Unknown
375 <220> FEATURE:
376 <223> OTHER INFORMATION: Alpha/beta-gliadin MM1 precursor of wheat protein
378 <400> SEQUENCE: 6
380 Met Lys Thr Phe Leu Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr
381 1          5          10          15
384 Ala Arg Ile Ala Val Arg Val Pro Val Pro Gln Leu Gln Pro Gln Asn
385          20          25          30
388 Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Gln Gln
389          35          40          45
392 Gln Phe Pro Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
393          50          55          60
396 Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
397 65          70          75          80
400 Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Leu Pro Tyr Pro
401          85          90          95
404 Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro Gln Gln
405          100         105         110
408 Pro Tyr Pro Gln Ser Gln Pro Gln Tyr Ser Gln Pro Gln Gln Pro Ile
409          115         120         125
412 Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Lys Gln Gln
413          130         135         140
416 Gln Gln Gln Gln Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu
417 145         150         155         160
420 Ile Pro Cys Arg Asp Val Val Leu Gln Gln His Ser Ile Ala Tyr Gly
421          165         170         175
424 Ser Ser Gln Val Leu Gln Gln Ser Thr Tyr Gln Leu Val Gln Gln Leu
425          180         185         190
428 Cys Cys Gln Gln Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala
429          195         200         205
432 Ile His Asn Val Val His Ala Ile Ile Leu His Gln Gln Gln Gln Gln
433          210         215         220
436 Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
437 225         230         235         240
440 Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Ser Phe Gln Pro Ser Gln
441          245         250         255
444 Gln Asn Pro Gln Ala Gln Gly Ser Val Gln Pro Gln Gln Leu Pro Gln
445          260         265         270
448 Phe Glu Glu Ile Arg Asn Leu Ala Leu Glu Thr Leu Pro Ala Met Cys

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Input Set : A:\034205.003.ST25.txt
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,10,11,12,13

VERIFICATION SUMMARY

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date